

WE CLAIM

1 1. An expression vector comprising a vaccinia virus having a deletion of the
2 region encoding amino acids 184-190 of the E3L gene product wherein said vector further
3 comprises exogenous DNA operably linked to regulatory elements that control expression
4 of said exogenous DNA.

1 2. The expression vector of claim 1 wherein said exogenous DNA encodes an
2 antigen.

1 3. The expression vector of claim 1 in which one or more non-essential virus-
2 encoded gene functions have been deleted from the vaccinia virus.

1 4. A composition comprising the expression vector of claim 1 and a carrier.

1 5. A method of making a recombinant gene product comprising subjecting an
2 expression vector comprising a vaccinia virus having a deletion of the region encoding
3 amino acids 184-190 of the E3L gene product and wherein said vector further comprises
4 exogenous DNA that encodes said recombinant gene product operably linked to regulatory
5 elements that control expression thereof, to conditions whereby said recombinant gene
6 product is expressed.

1 6. The method of claim 5 further comprising recovering said recombinant gene
2 product.